VOLUNTARY AGRICULTURAL DIESEL ENGINE RETROFIT PROGRAM

Through this project, the Idaho Department of Environmental Quality (DEQ) will demonstrate the effectiveness and utility of retrofitting agricultural diesel engines with diesel oxidation catalysts (DOC's). A wide range of engines used in a diversity of agricultural operations will be fitted with DOC's to examine the challenges and requirements posed by retrofitting these types of sources. Agricultural engines have historically been underrepresented in diesel retrofitting efforts, yet agricultural fleets are comprised of large numbers of heavy-duty diesel engines operating in relatively defined locations. Little practical experience is available to examine the obstacles for successful and effective retrofit programs for this sector. This is a real-world demonstration of diesel emissions reduction technology that we hope will have broad application across Idaho in reducing emissions and toxic health risks from this large source category.

DEQ is particularly interested in addressing such challenges as barriers to installation (such as on-farm as opposed to shop installations), operational characteristics of on-farm applications (power reductions, fuel economy, etc.), and acceptance by the user groups (owners, operators, mechanics). The main objectives of this demonstration project are:

- Reduce emissions from agricultural diesel engines fleets in the Treasure Valley;
- Develop effective methods to apply emissions control technologies to the agricultural sector;
- Develop solutions to barriers that exist in advancing air pollution control programs with the agricultural sector;
- Investigate and demonstrate DOC applications in real-world agricultural settings.

The project will be funded through a $50,000 grant from the *EPA VOLUNTARY DIESEL RETROFIT PROGRAM TECHNOLOGY DEMONSTRATION ASSISTANCE AGREEMENTS TO BENEFIT SENSITIVE POPULATIONS* grant program.